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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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TREDEGAR FILM PRODUCTS CORPORATION
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EXAMINER

PIERCE, JEREMY R

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/491,721

Applicant(s)

CREE ET AL.

Examiner

Jeremy R. Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on May 16, 2005 has been entered. Claim 25 has been amended. New claims 30-32 have been added. Claims 1-17 and 25-32 are currently pending. The amendment is sufficient to withdraw the 35 USC 112 2nd paragraph rejection to claims 25-29 set forth in section 5 of the last Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 25-29 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 25 recites "the tear-resistant laminate has not been further substantially consolidated after assembly." Support for this limitation is not found in the specification. Negative limitations are not allowed in the claims unless specifically set forth in the specification. *Ex parte Grasselli*, 231 USPQ 393.

Claim 32 recites "said combined laminate ultimate force to break is a multiple of the ultimate forces to break of each of said at least two nonwoven webs, with said multiple being at least two, and progressing upwardly as additional nonwoven layers are provided to said laminate." Support for this limitation is not found in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites "said tear resistant laminate having a combined laminate ultimate force to break of at least the combined values of said at least two nonwoven webs." Since claim 30 earlier recites that ultimate force to break of the two individual nonwoven webs is greater than 1500 g/in, one would assume that this limitation must mean the ultimate force to break the laminate must be at least 3000 g/in. However, claim 31 recites "said combined laminate ultimate force to break is at least 3000 g/in." Does this mean that claim 31 fails to further limit the parent claim? Or does it mean that the limitation in claim 30 means something else? If so, then what does that limitation in claim 30 mean?

Claim 32 recites "said combined laminate ultimate force to break is a multiple of the ultimate forces to break of each of said at least two nonwoven webs, with said multiple being at least two, and progressing upwardly as additional nonwoven layers are provided to said laminate." This claim limitation is confusing because it does not seem

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to be claiming any specific product. Rather, it seems to be claiming a concept of adding layers to provide strength. What is the product supposed to be here? How many layers are there?

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 9-11, 13-17, and 25-32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morman (U.S. Patent No. 5,336,545).

Morman teaches a composite elastic neck-bonded material comprising a necked fabric bonded to an elastic sheet (column 3, lines 19-24). The elastic sheet may be a film (column 3, lines 6-7) and can have two necked fabrics bonded on both sides of it (column 3, lines 31-35). Morman uses similar materials as the Applicant, such as polypropylene for the necked nonwoven fabric (column 25, lines 41-45) and block copolymers for the elastic sheet (column 6, lines 55-56). Although Morman does not

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explicitly teach the limitations ultimate force to break values of the nonwoven fabrics and the composite in grams per inch, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polypropylene for the nonwoven and block copolymer films for the elastic sheet) and in the similar production steps (i.e. stretching two fabric layers in a lengthwise direction to compact the web in a widthwise direction) used to produce the elastic composite material. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, it would have been obvious to a person having ordinary skill in the art to provide the claimed ultimate force to break properties in order to provide a composite with an increased resistance to breaking, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. With regard to claim 3, having between 2 and 50% of the thermoplastic fibers skewed in a direction greater than about 10 degrees from the machine direction is an inherent feature to the nonwoven web of Morman since the webs are meltblown, which involves random deposition of the fibers. With regard to claim 4, Morman teach the nonwoven web is made from microfibers with an average diameter of from about 4 to 40 microns (column 2, lines 32-37). It is known that 15-micron polypropylene is equal to 1.42-denier polypropylene; thus, Applicant's claimed range for fiber mass per unit area is clearly anticipated. With regard to claim 5, meltblown fibers are randomly deposited

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(column 2, lines 38-50). With regard to claim 6, Morman discloses the fabric can weigh between 0.2 and 10 ounces per square yard (column 6, lines 5-21). With regard to claim 10, Morman discloses the preferred use of low weight elastic sheets for economic reasons, but also discloses the use of sheets with a basis weight of up to 10 ounces per square yard (column 9, lines 1-7). With regard to claims 13 and 29, although Morman does not explicitly teach the limitation of Dart Impact value for the elastic sheet, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. block copolymer) and in the similar production steps (i.e. similar weights) used to produce the elastic sheet. The burden is upon the Applicant to prove otherwise. In the alternative, it would have been obvious to one having ordinary skill in the art to provide a polymeric film layer with a Dart Impact value of at least 400 grams in order to create a film that is puncture and resistant, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claims 15-17, Morman discloses the nonwoven fabrics and elastic sheet can comprise multiple layers (column 3, lines 19-46). With regard to claim 25, the nonwoven fabrics are set because meltblown fabrics have fibers that are bonded sufficiently to form a fabric. Alternatively, the recitation that the nonwoven web is set before being bonded to the film is the recitation of a processing step that would not create a materially different product. When the nonwoven fabrics of Morman are bonded to the film, heat is applied (column 8, line 56). The fibers would remain in a transversely consolidated state, thereafter, and the final product would be substantially similar to the claimed product. With regard to

claims 30-32, because the product of Morman appears similar to that claimed by Applicant, the burden is upon the Applicant to prove that the claimed property is not inherent, as set forth above.

Claim Rejections - 35 USC § 103

9. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morman in view of Hassenboehler et al. (U.S. Patent No. Re 35,206).

Applicant argues that Morman does not disclose the nonwoven webs to be substantially permanently set in a transversely consolidated state. The Examiner disagrees, as set forth above in section 8, because the limitation that the web is "set" is indefinite and not clearly defined in the specification. Alternatively, Hassenboehler et al. teach transversely consolidating a nonwoven web (Abstract). Hassenboehler et al. teach that the nonwoven materials exhibit remarkable elasticity in the cross-direction (column 8, lines 30-34). It would have been obvious to a person having ordinary skill in the art at the time of the invention to transversely consolidate the web of Morman in order to provide increased elasticity in the cross-direction, as taught by Hassenboehler et al.

10. Claims 7, 8, and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Morman in view of Haffner et al. (U.S. Patent No. 5,789,065).

Morman do not teach the elastic sheet to be made from metallocene-based low-density polyethylene film. Haffner et al. disclose block copolymers and metallocene-catalyzed ethylene films as suitable elastic film layers useful in the same art of personal

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care products. It would have been obvious to one having ordinary skill in the art to use a metallocene-catalyzed ethylene film in the composite of Morman, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. With regard to claim 12, Morman does not teach perforating the elastic sheet. However, Haffner et al. disclose providing perforations in the elastic film layer allow it to be breathable. It would have been obvious to one having ordinary skill in the art to provide perforations in the elastic sheet of Morman in order to provide breathability to the composite, as taught by Haffner et al.

Response to Arguments

11. Applicant's Declaration filed on March 8, 2005 has been fully considered but is not persuasive.

12. In the Declaration, Applicant asserts that the production steps of Morman are not similar to those of the present invention. Applicant states that the Morman tensioning system weakens the fabric and in all probability, would provide a weakened composite. However, these statements do not prove that the material of Morman fails to meet the claimed property limitations of ultimate force to break. Even if the product of Morman does not have the same strength properties as the material of Applicant's invention, it may still meet the limitations set forth in the claims. The product of Morman appears structurally similar to the material set forth in the claims and it is therefore reasonable to assume that the property limitations that result from that structure are similar. Applicant

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has not met the burden of proving the material of Morman fails to meet the claim limitations.

13. Applicant's arguments filed March 8, 2005 have been fully considered but they are not persuasive.

14. Applicant argues that Morman applies a tensioning force to the fabric whereas the nonwoven fabric of the present invention is consolidated. However, it is quite clear that the process Applicant uses in consolidating the web involves applying tension to the fabric. Page 11 of the Specification refers the reader to U.S. Patent No. Re. 35,206, issued to Hassenboehler et al., for the method of lateral consolidation. This patent clearly shows the consolidation of the nonwoven fabric is created by a tensioning force (Figure 2). Applicant has not set forth any differences between the type of tension force being applied to the fabric shown in Hassenboehler et al. and the type of tension force being applied to the fabric in Morman. Applicant refers to the Declaration of James Cree, which is said to make clear that the tensioning in Morman is likely to weaken the nonwoven in contrast to the nonwoven of the present claims which is likely to be strengthened as a result of consolidation. It is not clear why tensioning the fabric of Morman creates a weakness whereas the tensioning done to the fabric of the present invention creates strength. Therefore, the arguments alone are not sufficient to withdraw the conclusion that Morman inherently possesses the claimed ultimate force to break values. Also, even if different processes are used, Morman still provides a structurally similar laminate to that found in the claims. Therefore, it is reasonable to presume that any resulting properties are inherent even when there exist differences in

the processes of manufacture. The burden lies with Applicant to show this property is not present in Morman. Applicant has not overcome this burden with the present arguments.

15. Applicant argues that the combination of Morman with Hassenboehler et al. is impermissible hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

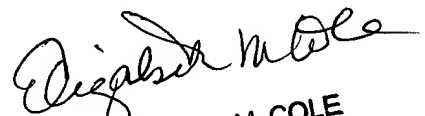
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on Monday-Friday between 9am and 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeremy R. Pierce
June 14, 2005



ELIZABETH M. COLE
PRIMARY EXAMINER